Selected Design Applications

Four
Design Principles form a crucial link of programming requirements to better design

The attempt to urge the student to consider the future user's needs during the design process is not a revolutionary idea. The topic of research based user requirements has been included in the architect's education for more than twenty years. Many architectural educators might confess how lifeless this topic can be to a young person with dreams of creating architectural forms. What excited us about this approach was making such a clear and stimulating connection between behavioral needs and the formation of challenging design insight. The device that we found to construct this bridge was the "Design Principle".

In a sense, the long and known list of user requirements can be called "Design Topics". These have the unfortunate property of being all too general and weak at defining the design's performance criteria. In past attempts we found that by only requiring the student to research these lackluster topics by literature review, case study, analysis these design topics continued to remain low in influence. These drab topics were all too quickly ignored and disregarded when the heady search for a design solution began.

The breakthrough came in insisting that the student develop "Design Principles" which by their nature require link the user's needs to design thinking. These have already been described in detail in Part Two. What Part Four emphasizes is just how much influence just a few "Design Principles" can have on the design.

How the studio designers chose their design program

All students were required to meet the basic architectural program for the Law Office. They had to design within the actual enclosure envelop on the top four floors of an office building at the corner of LaSalle and Wacker in downtown Chicago. What varied was which set of Design Principles each elected. One factor in selection was how well developed each design principle was by that mid-point in the semester. Another factor was that each student felt capable of just so many issues given the remaining studio time. We felt it instructive for the reader to see the elective pattern for all principles by all student designers. After all, this class represents the typical aspirations of the designers that you work with in the profession.

The matrix on the next page shows the elective pattern of the major Design Principles for each designer. The average that were successfully integrated was about three per designer. You have been seeing glimpses of many of the resulting solutions as you read Part Two and Part Three. Following the next page you will see two solutions in greater detail, and how many of the office's design features can be attributed to specific Design Principles.

Each designer had to prioritize and select only those Design Principles they felt most important and that could be managed in the remaining studio time.
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Matrix Showing Design Principles Selected By Each Designer

Must One Use All Design Principles?

This matrix shows the pattern of use of design principles by different designers. It illustrates that not all design principles have to be employed in each design application, nor that the same ones are to be used by all designers. However, it also shows that some principles (e.g. Neighborhoods, Indoor/Outdoor) are more "popular" than others.
Group Integration
Clusters of four offices and work stations for several support staff create identifiable "neighborhoods."

Status
Windowside offices are traditionally valued; the cluster design allows for expression of hierarchy yet does not devalue the other spaces; support staff is given a shared quality space, too.

Legibility
Shorter passages, the unique form of the curved "main street" and open views to most public space and to outdoors help in spatial orientation and wayfinding.

Interaction
The entry and waiting area merge into the "street cafe". This and other central amenities provide places for interaction both for the public and employees.

Design by Adrian Langhus. Plan view of 26th floor featuring library.
Image
Visual landmarks such as the circular stair and the library as a "showcase" provide a particular ambience and help to deinstitutionalize the interiors.

Sense of the whole
The thematic, repetitive design; the curved "main street", "public library", and the circular stair case provide a comprehensive sense of the office.

Security and confidentiality
Controlled access to each group of offices ("neighborhoods"), and provision of a variety of secure meeting rooms create both an actual and perceived sense of security.

Indoor/outdoor connection
The plan provides a high degree of transparency; most public spaces have a direct view to the outside.
Interaction
Common areas shared by employees in each "neighborhood" provide opportunities for interaction and relaxation during formal and informal breaks.

Group Integration
Clusters of four to six offices with partially enclosed shared secretarial stations create identifiable "neighborhoods".

Indoor/outdoor connection
Secured corridors terminate in views to the outside and provide natural light. The central atrium area also provides a high degree of transparency and a direct link to the south light.

Image
The multi-level library has a contemporary "show case" quality, radiating through the open atrium. The unusual configuration coupled with the adjacent public and open spaces, provide a visual landmark and a unique interior image.

Sense of the whole
The multi-story library is a building within the atrium, visually observable from many vantage points, and conceptually "connecting the parts" of the office.

Legibility
The simple but interesting plan configuration, the prominent atrium and library as "landmarks", and visual connections to the outside aid in spatial orientation and way finding.

Retreat
Employees and visitors can use these semi-public areas for relaxation, intimate conversation, or solitary reflection. Few in number and variable in size, these spaces provide some level of privacy, yet are accessible, and allow views to the atrium and to the outside.